

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/31167

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : F16K 11/087

US CL : 137/625.47, 887

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 137/625.47, 887

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,479,459 A (PIPER) 30 October 1984 (30.10.1984), figures 2 and 6-9	1-2, 15-17, 8, 10-12
Y		6-7, 9

<input type="checkbox"/>	Further documents are listed in the continuation of Box C.	<input type="checkbox"/>	See patent family annex.
*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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Date of the actual completion of the international search 04 January 2005 (04.01.2005)	Date of mailing of the international search report 11 FEB 2005
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